REMARKS

Claims 1, 2, 8, 9, 12, 18, 19, 28, 29, 33, 37-40, 44-48, 49, 53, 66, 69, 72, 74-81 and 86-90 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Berger *et al.* U.S. Patent No. 6,121,200 ("Berger") and Caldwell et al (Archieves of Environmental Contamination and Toxicology) ("Caldwell"). The applicants respectfully traverse this rejection.

Berger is related to using an acid herbicide in the salt form.

Berger states at column 10, lines 47-51:

> The present herbicidal compositions are not limited to a particular herbicide or mixture of herbicides. They may be used with a variety of pesticides, including but not limited to **herbicides in any of their water soluble salt forms**. (emphasis added).

Berger further states at column 11, lines 12-30:

> Since **glyphosate in acid form has limited water solubility (about 1.2%) the water soluble salts of glyphosate are normally used for most applications**. Among the water soluble salts of glyphosate are the trimethylsulfonium salt, the ammonium **salt**, the isopropylamine salt, and the alkali metal salts, such as sodium and potassium. These compounds due to their solubility in water are the agriculturally acceptable glyphosate-containing compounds generally used in commerce.
>
> It is known to use mixtures of glyphosate and one or more of its **water soluble salts**. Previously mentioned European Patent 290,416 discloses the use of such mixtures which have the advantage of a higher concentration of glyphosate in the final product. However, **the low solubility of the glyphosate in acid form limits the amount of it in the total composition**. This amount will depend in general on the solubility of the water soluble salt used in the combination. (emphasis added)

As noted, these are all salts and Berger teaches away from using the acid form because it has limited water solubility. Furthermore, it is confirmed in Berger that salts are required at column 11, line 45 through 58 which states:

> Stable aqueous concentrate compositions of the present invention can be made with glyphosate **salts** at a concentration from about 5% to about 50%, preferably about 35% to about 45%, surfactant composition at a concentration of about 5% to about 25%, preferably about 10% to about 15%, and water making up the balance to 100%. Dry water soluble granular (WSG) or water dispersible granular (WDG) compositions of the present invention can be made with glyphosate **salts** at a concentration from about 10% to about 85%, preferably about 50% to about 80%, surfactant composition at a concentration of about 5% to about 30%, preferably about 10% to about 25%, and optionally inert ingredients making up the balance to 100%. (emphasis added).

Berger also states at column 12, lines 46-60:

> In one preferred embodiment of the present invention the surfactant composition comprised of the amine surfactant component and the sulfated polyoxyalkylene alkylphenol having sulfonate substituents in the phenyl moiety and/or phosphate ester as above defined can effectively be used to formulate glyphosate. Glyphosate is the widely recognized common name for N-phosphonomethylglycine, the biologically active entity of **which is the acid form and may be used in the form of an ester but is normally used in the form of water soluble salts**. Water soluble **salts** include alkali metal **salts** of glyphosate, and organic **salts** of glyphosate including onium salts such as ammonium, sulfonium and phosphonium **salts** of glyphosate. The most preferred **salts** include ammonium, isopropylammonium and trimethylsulfonium **salts** of glyphosate.

The Examiner argues that Berger does not teach solely on the use of chlorinated carboxylic acid herbicides in the salt form, but rather teaches that the chlorinated carboxylic acid herbicides are usually employed in salt form. This is correct. The

Examiner interprets the term usually as meaning in most cases rather than in all cases. Therefore, the Examiner deduces that there are instances in which Berger may find it useful to make a composition comprising 2,4-D (a chlorinated carboxylic acid herbicide) as a free acid. There were no situations given in Berger where one of ordinary skill in the art would select the acid form over the salt form.

Although Berger acknowledges that glyphosate may exist in the acid form, Berger teaches that the glyphosate is used in the salt form. Clearly, Berger teaches away from using the herbicide in the acid form because of the limited solubility. The teaching of Berger to use glyphosate in the salt form is also recognized in the applicants' specification as the prior art. The applicants' specification at page 2, lines 1 through 9 state:

> Chlorinated carboxylic acid herbicides are usually have traditionally been reacted into amine or other salts, which are soluble in water, or into esters which are oil soluble. **Both salts** and esters must then break down in the environment back into the acid, which is herbicidal.
>
> It would be preferable, then, to apply the herbicides **as acids. However, they are not significantly soluble in water**. Previously, solvents used to formulate 2,4-D acid such as xylene range hydrocarbons, are known to be phytotoxic to plants and may enhance herbicide volatility and subsequent drift to non-target areas. Albaugh D-638 is one such product, but it further incorporates the ester form of 2,4-D into the formulation. (emphasis added).

Again, the applicants have recognized that glyphosate used in salt form is used in the prior art. However, it was not known to use the herbicide such as glyphosate in the acid form. For the above reasons, Berger teaches away from the applicants' claimed invention.

The Examiner combines Berger with a toxicology report on 2,4-D in the acid form. The Examiner asserts that a person skilled in the art could have seen that using Berger's surfactants

would enhance the efficacy of the free acid form of 2,4-D. The applicants respectfully disagree. The existence of a toxicology report for 2,4-D in the acid form is not surprising. 2,4-D acid is the initial form in which the herbicide was discovered. However, commercial formulations have always been made from the ester or amine salts of 2,4-D for the reasons stated in the patent application. The applicants acknowledge the prior existence of 2,4-D in the acid form. This is about the extent to which a toxicology report such as that from Caldwell helps a formulation chemist.

The Examiner takes the view that Cadwell teaches a herbicidal composition wherein 2,4-D is in free acid form. Examiner argues that there exist ample motivation for combining the prior art references of record since references individually teach herbicidal compositions. This is not motivation.

As stated above, Berger actually teaches away from using the free acid form of 2,4-D since it is not water soluble. From Berger's patent, "In this regard, a further important aspect of the present invention concerns surfactant compositions which are effective in the formulation of glyphosate-containing herbicidal compositions or pesticidal compositions of other water soluble active ingredients." In several other places of the patent, Berger is talking about amine salts of 2,4-D and other herbicides when he refers to them as water soluble. Free acid 2,4-D is NOT water soluble in appreciable amounts. Only the amine salts are water soluble. Given this fact, it is even less likely that one skilled in the art would combine a toxicology report on the free acid 2,4-D and Berger's patent.

The applicants have discovered a way to dissolve the acid form of this herbicide into a form that is usable by the farmer. Other than D-638 (which the applicants disclose in the

application) which uses an aromatic solvent to dissolve the acid in combination with 2,4-D ester, nobody has commercially introduced a herbicide product which contains 2,4-D in the acid form.

The Examiner must consider the references as a whole, In re Yates, 211 USPQ 1149 (CCPA 1981). The Examiner cannot selectively pick and choose from the disclosed multitude of parameters without any direction as to the particular one selection of the reference without proper motivation. The mere fact that the prior art may be modified to reflect features of the claimed invention does not make modification, and hence claimed invention, obvious unless desirability of such modification is suggested by the prior art (In re Baird, 29 USPQ 2d 1550 (CAFC 1994) and In re Fritch, 23 USPQ 2nd. 1780 (Fed. Cir. 1992)). The applicants disagree with the Examiner why one skilled in the art with the knowledge of the references would selectively modify the references in order to arrive at the applicants' claimed invention. The Examiner's argument is clearly based on hindsight reconstruction.

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching, suggestion, or incentive supporting this combination, although it may have been obvious to try various combinations of teachings of the prior art references to achieve the applicant's claimed invention, such evidence does not establish prima facie case of obviousness (In re Geiger, 2 USPQ 2d. 1276 (Fed. Cir. 1987)). There would be no reason for one skilled in the art to combine Berger and Caldwall. For the above reasons, this rejection should be withdrawn.

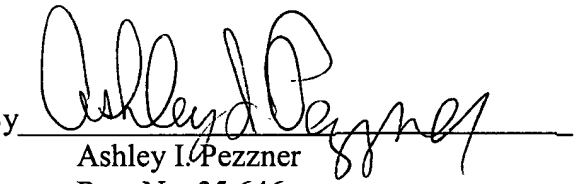
The applicants respectfully request that the previously submitted disclosure statement mailed on October 13, 2003, prior to the final office action, be made of record.

The applicants have filed a Notice of Appeal and a two month extension. No additional fee is due. If there are any additional fees due in connection with the filing of this response, including any fees required for an additional extension of time under 37 CFR 1.136, such an extension is requested and the Commissioner is authorized to charge or credit any overpayment to Deposit Account No. 03-2775.

A prompt favorable action is earnestly solicited. If the Examiner deems the election non-responsive, the applicants respectfully request that the Examiner contact the undersigned at (302) 88-6270.

Respectfully submitted,

CONNOLLY BOVE LODGE & HUTZ LLP

By 

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